

Groundwater Review for New Chemicals

$K_d = \uparrow$ less mobile

(A) Product contains a new active ingredient (first time product being licensed in Hawaii).

- 1) Product has K_d more than 5 (low laboratory-derived mobility) and low persistence characteristics (e.g. hydrolysis half-life less than 30 days at any pH or aerobic soil metabolism half-life less than 2 weeks). 0 points

$K_d < 5$
(.067 - .6)
sand / clay

Product has K_d less than 5 (laboratory-derived mobility) and persistence characteristics (e.g. hydrolysis half-life greater than 30 days at any pH or aerobic soil metabolism half-life greater than 2 weeks) similar to other pesticides found in groundwater as a result of normal label uses. 15 points

($> 1yr$)
(loamy soil)

- 2) Total acreage (all uses on EPA stamped approved labels containing the active ingredient) is less than 10,000. 5 points

Total acreage (all uses on EPA stamped approved labels containing the active ingredient) is more than 10,000. 10 points

golf courses, turf, lawns, etc.

- 3) Application of the pesticide is made directly to the soil; or pesticide is systemic and acts by moving throughout the plant, including the roots. 10 points

translocated

Application of the pesticide is made to foliage, indoors, within the drip line of a structure's roof, in bait boxes or other protective devices to shield chemical from the environment, to swimming pools, as a coating for a structure, or other use patterns where contact with soil is minimal. 0 points

(A) = 35 PTS.

(B) If score is 30 points or higher at this point, request environmental fate data:

Analysis of chemical data shows that the pesticide is "likely" to leach in areas registered for use, or has groundwater labeling restrictions or advisories based on modeling using Attenuation Factors or charts reflecting the relationship between chemical properties and Hawaiian soils. 15 points

Analysis of chemical data shows that the pesticide is "unlikely". 5 points

A + B = 50

(C) **Review Action:** If there is a score of 45 or more: Submit for review and seek comments on classification: Options include: 1) do not license, 2) Annual Use Permit, or 3) licensed as restricted.

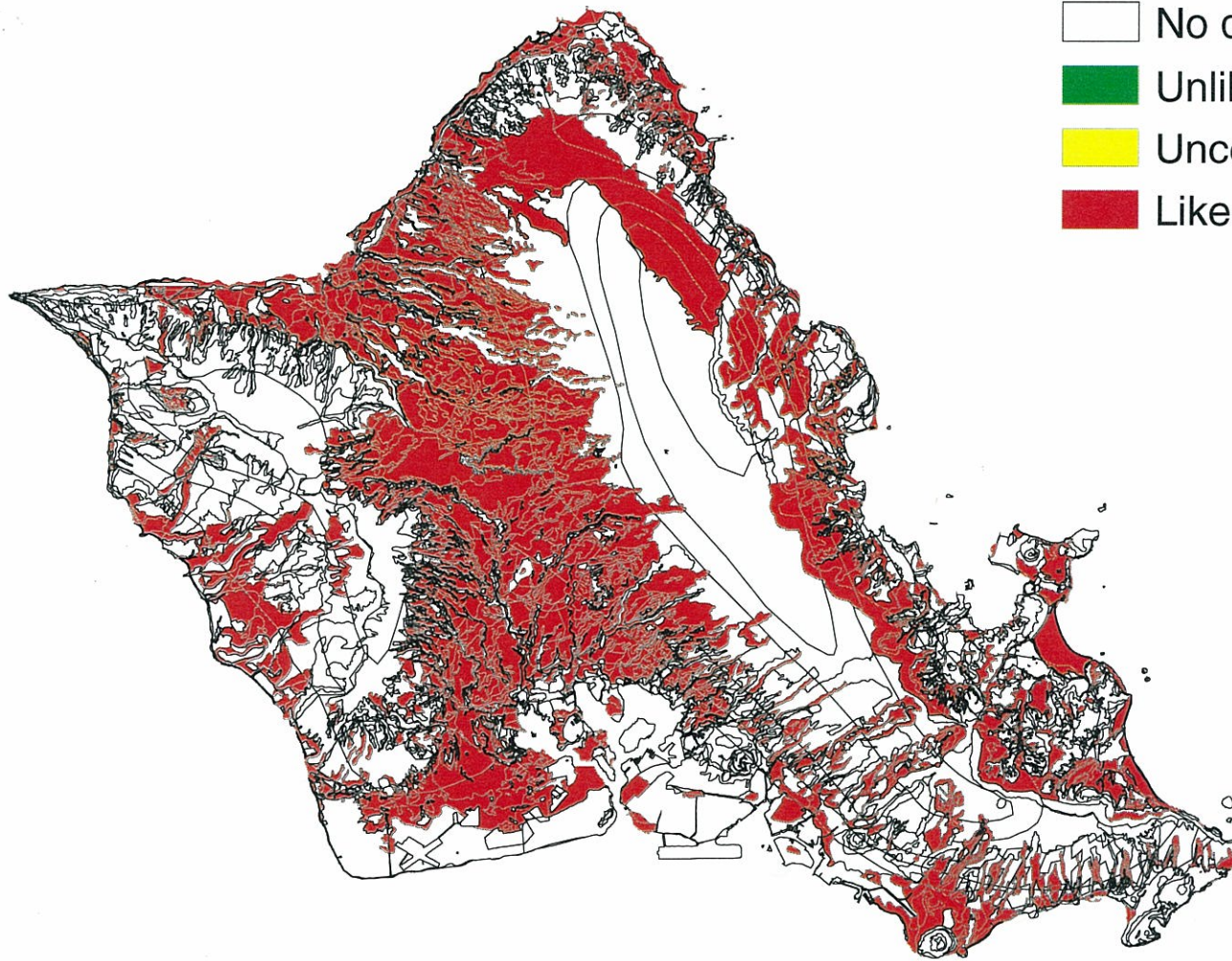
Score of less than 45: license product without a groundwater review.

Still would have triggered GW review.

Quinclorac Potential to Leach: Oahu

Legend

- No data
- Unlikely
- Uncertain
- Likely



Hawaii Department of Agriculture
Pesticides Branch

Active Ingredient: quinclorac

Submitted for (registrant): _____

Submitted by: _____
Name Date

Preliminary groundwater data request

- 1) Kd: 0.067-0.4 mL/g
- 2) Koc 0.054 m³/kg
- 3) Standard deviation of Koc 0.01 m³/kg
- 4) Soil half-life: 168 days
- 5) Standard deviation of soil half-life: 50 days
- 6) Hydrolysis half-life _____

*Please email to Christina Zimmerman

christina.y.zimmerman@hawaii.gov
(808) 973-9412